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| 09/642,358      | 08/21/2000  | Zvi Or-Bach          | OR-Bach3            | 8171             |

7590 06/02/2004  
Kenneth E. Leeds  
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EXAMINER

LE, DAVID Q

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3621

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n N .

09/642,358

Applicant(s)

OR-BACH ET AL.

Examiner

David Q Le

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-- Th MAILING DATE f this c mmunication appears n the cover sh et with the corresp ndence address --

**Peri d f r Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5-28 and 30-59 is/are pending in the application.
- 4a) Of the above claim(s) 33-59 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-28 and 30-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Pri rity under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>Z</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Examiner's Note*

1. The Examiner has pointed out particular references contained in the prior art of record in the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claims, other passages and figures apply as well. It is requested from the Applicant, in preparing the response, to consider fully the entire references as well as the context of all passages in the cited references as potentially teaching all or part of the claimed inventions.

### *Status of Claims*

2. Per the Amendment filed on 11 February 2004:  
Claims 1, 3, 5, 8-10, 20, 28, 34-53, and 55-58 were amended.  
Claims 4, 29, and 60-61 were canceled.  
Claims 1-3, 5-28, and 30-59 remain pending.

### *Election/Restrictions*

3. Claims 33-59 were withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention directed to a vehicle control, guidance, and fleet operation system, there being no allowable generic or linking claim. Election was made **without** traverse in the Amendment filed on 11 February 2004.

### *Response to Request for Consideration*

4. The request for consideration in the Amendment filed on 11 February 2004 under 37 CFR § 1.111 has been considered but is ineffective to overcome the references Belcher et al. and Garber et

al., US Patents No. 5,920,287 and 6,232,870 B1, respectively.

### ***Response to Arguments***

5. Applicant's arguments with respect to **Claims 3, 4, and 19-21** have been considered but they are not persuasive.

With regards to **claim 3**: Applicant argues that the references do not teach "at least a light beam source for pointing to said package with a light beam, the direction of said light beam being in response to said signal". Examiner disagrees with this reading of the references.

First, Belcher clearly discloses that his system provides for an exchange of transmissions between the ID tags and a querying wand (Abstract; Background and Summary of the Invention; Fig 1; associated text). Belcher is directed to an "asset management system" wherein both ID tags and querying wand can beam "spread spectrum" pulses at one another, in response to each other's initial transmission or query, for the purpose of pin-pointing the location of the objects equipped with said ID tags.

Similarly, Garber is directed to various applications utilizing RFID devices including tags and hand-held reader devices, again exchanging transmissions, for the purpose of locating objects equipped with such tags (Abstract; Background, Summary of the Invention). Garber further teaches that during that locating process, "feedback to the user is preferably provided through a combination of sound, lights, and a display" (Col. 15, lines 1-10, 32-38).

It would have been obvious to one ordinarily skilled in the art and RFID technology as the time the invention was made to have included a light beam in the reader in order to further aid the user in locating an inventory item, once the item's RFID tag has identified itself positively to the reader's query. Such a feature, as taught by both Belcher and Garber, would allow a user to better locate the item in a dark, crowded warehouse or back of a transport truck, and would make the system a more attractive one for users to adopt.

With regards to **claim 4**: Applicant argues that the references do not teach that the RFID tags may generate a sound or a light in response to a query from a reader. Again, Examiner disagrees with this reading of the references. Using the same citations as above, it is clear that Belcher teaches that the ID tags affixed to inventory items may emit light pulses, either intermittently, or in response to a query from a reader, for the purpose of locating the items. Combined with the teachings from Garber regarding

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the use of light and sound in the same type of application, it would have been obvious to one ordinarily skilled in the art at the time the invention was made to have included this feature, in order to further facilitate the locating of inventory items in a crowded and dark warehouse or truck bay, thus making the system more attractive to potential users.

With regards to **claims 19-21**: Applicant argues that the references do not teach the limitations of these claims. Belcher is very clear about the applications of his system: asset management, which includes tracking, locating, inventory control, "where continuous knowledge of the whereabouts of any and all assets of a business, factory, educational, military or recreational facility, and the like, is desired and/or required" (Col 2, lines 4-15). It would have been obvious to one ordinarily skilled in the art at the time the invention was made that the limitations recited in these claims would have been obvious embodiments of applications similar to the ones Belcher cited in his disclosure, in order to provide a full asset management system as describe by Belcher.

#### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1-3, 5-28, and 30-32** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Belcher et al.** in view of **Garber et al.**, US Patents No. 5,920,287 and 6,232,870 B1, respectively.

As per **claims 1, 3, 5, 6, 8, 10**

Belcher discloses

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A system/method comprising:

a delivery vehicle (Abstract, Summary, Fig 1, "vehicle tracking (moving or stored)"; "shipping containers");

a set of packages within said vehicle, said packages having a signal responsive tag (Fig 1: "pallet storage");

a transmitter/pointing device for querying one of the signal responsive tags within said vehicle to thereby locate the package corresponding to said signal responsive tag (Fig 1: "interrogator #30"); and

identifying a package corresponding to said queried signal responsive tag (Fig 1: "asset management database, "RF processor system"; associated text). [claims 1, 5, 6]

said tag generating a signal in response to said querying (same citations as above) [claim 5]

Belcher also discloses (above citations; C2, L80 – C3 L2)

providing a signal for querying a signal responsive tag, said tag being within or affixed to said package within said vehicle;

receiving a reply signal from said tag;

determining the location of the tag in response to the reply signal from the tag and indicating the location of the tag [claim 8].

Belcher does not specifically disclose

a sound generating device or light source secured to said queried signal responsive tag [claim 1]

an output structure coupled to said tag for providing an audible or visible output identifying the package corresponding to said queried tag [claim 6]

using one or more light beams for pointing toward the tag, the direction of said light beams being responsive to said reply signal [claim 8]; the direction of said light being in response to said signal [claim 3]

said audible and/or visible indication being provided by an indication source secured to said tag [claim 10].

However Belcher discloses that his system provides for an exchange of transmissions between the ID tags and a querying wand (Abstract; Background and Summary of the Invention; Fig 1; associated text). Belcher is directed to an "asset management system" wherein both ID tags and querying wand can beam "spread spectrum" pulses at one another, in response to each other's initial transmission or query, for the purpose of pin-pointing the location of the objects equipped with said ID tags.

Similarly, Garber is directed to various applications utilizing RFID devices including tags and hand-held reader devices, again exchanging transmissions, for the purpose of locating objects equipped with such tags (Abstract; Background, Summary of the Invention). Garber further teaches that during that

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locating process, "feedback to the user is preferably provided through a combination of sound, lights, and a display" (Fig 13; C14, L53 – C15, lines 1-10, 32-38).

It would have been obvious to one ordinarily skilled in the art and RFID technology as the time the invention was made to have included a light pulse or audible sound from the tag and/or a light beam in the reader shining toward the located tag in order to further aid the user in locating an inventory item, once the item's RFID tag has identified itself positively to the reader's query. Such a feature, as taught by both Belcher and Garber, would allow a user to better locate the item in a dark, crowded warehouse or back of a transport truck, and would make the system a more attractive one for users to adopt.

As per **claims 13, 14, 19, 20, 21, 27.**

Belcher discloses (Summary, Fig 1, associated text)

A system/method comprising:

a vehicle for carrying packages;

means for determining when the vehicle reaches a destination (C2, L80 – C3, L2); and

Belcher does not specifically disclose

means for generating a list of transactions at said destination when said vehicle is determined to have arrived at said destination [claims 13, 14, 19].

However Belcher teaches that his RF locating system may be used in many different applications (C12, L30-L59). One such obvious application to one ordinarily skilled in the art at the time the invention was made would be to further automate shipping, delivering, picking up, and taking possession of goods, in order to fully utilize the capabilities of the system.

Another obvious application would be advising shippers and receivers alike of the time when goods have moved from or reached certain locations, therefore meeting the further limitations:

automatically communicating a to a purchaser when the goods have arrived at said destination [claims 20, 21, 27]

As per **claims 28 and 32.**

Belcher discloses (all above citations; Fig 1:"Asset Management Database"; associated text):

A method/system comprising:

providing a set of packages on a vehicle, at least some of said packages comprising a signal responsive tag within or affixed thereto;

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providing a database listing said packages within said vehicle;  
removing at least some of said packages from said vehicle;  
scanning the tags within or affixed to said packages; and  
updating said database in response to said scanning.  
.wherein said tags are RFIDs .....couple to said scanner via a WAN.

As per claims 2, 7, 9, 11-12, 15, 17-18, 22-23, 25-26, 30-31.

Belcher in view of Garber discloses all the limitations of independent claims 1, 5-6, 8, 10, 13-14, 19-21, 27-28, 31.

Belcher in view of Garber further disclose (see obviousness and motivation analyses above for the respective limitations):

[claim 2] signal responsive tag is an RFID.

[claim 7] tag is an RFID and the output structure is either a light emitting device secured to the queried RFID for providing a visible output identifying said RFID or a sound emitting device secured to the queried RFID for providing an audible output identifying said RFID.

[claim 9] tag is an RFID.

[claim 11] tag is an RFID and said audible indication is provided by a sound-emitting device coupled to the RFID.

[claim 12] tag is an RFID and said visible indication is 17provided by a light-emitting device coupled to the RFID.

[claim 15] automatically sensing comprises sensing a RFID

[claim 17] list of transactions comprises a list of packages to be taken off of said vehicle and delivered to said destination.

[claim 18] list of transactions comprises a list of packages 18to be placed on said vehicle from said destination.

[claim 22] sensing a RFID within or affixed to said vehicle.

[claim 23] sensing RFIDs within or affixed to said packages.

[claim 25] sensing device automatically senses when the vehicle has arrived at said destination, said sensing device being coupled via a WAN (Belcher: Fig 1) to a computer system, said computer system initiating a message to a purchaser in response to the arrival of said vehicle.

[claim 26] automatically senses when the packages have arrived at said destination, said sensing device being coupled via a WAN to a computer system, said computer system initiating a message to a purchaser in response to the arrival of said vehicle.



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[claim 30] tags are RFIDs and said providing of said 10database comprises scanning the RFIDs of packages loaded onto said vehicle to thereby establish a list of said packages within said vehicle.

[claim 31] querying said database to ascertain the location of said package.

As per claims 16 and 24.

Both references are silent on a GPS being affixed to the vehicle, said automatically sensing being performed by said GPS.

However, because GPS has become a well-known popular, and cost effective method for accurate determination of a geographical location, it would have been obvious to one ordinarily skilled in the art at the time the invention was made to have integrated this feature into Belcher's system, so that the process of locating vehicles and packages would be even more reliable, accurate, and fast, thus attracting even more users to the system.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

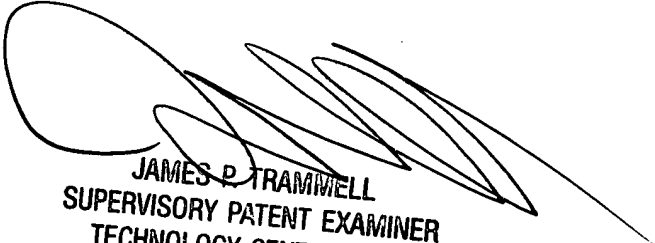
Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Q Le whose telephone number is 703-305-4567. The examiner can normally be reached on 8:30am-5:30pm Mo-Fri.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James P Trammell can be reached on 703-305-9768. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DQL



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